

(4) Its 1990 actual SO₂ emissions rate is at least 50 percent less than the lesser of its 1980 actual or allowable SO₂ emissions rate;

(5) Its 1997 actual SO₂ emission rate is less than 1.2 lb/mmBtu;

(6) It commenced commercial operation after January 1, 1970;

(7) It is part of a utility system whose combined commercial and industrial kilowatt-hour sales increased more than 20 percent between calendar years 1980 and 1990; and

(8) It is part of a utility system whose company-wide fossil-fuel SO₂ emissions rate declined 40 percent or more from 1980 to 1988.

(b) *Submittal procedures.* Not later than March 1, 1998, in order to be eligible for allowance allocations under this section, the designated representative for the unit must submit a photocopy of the unit's 1997 Form EIA-767 and a letter certifying that the photocopy is a true copy.

[58 FR 15710, Mar. 23, 1993]

§ 73.20 Phase II early reduction credits.

(a) *Unit eligibility.* Units listed in table 2 or 3 of § 73.10 are eligible for allowances under this section if:

(1) The unit is not a unit subject to emissions limitation requirements of Phase I and is not a substitution unit (under 40 CFR 72.41) or a compensating unit (under 40 CFR 72.43);

(2) The unit is authorized by the Governor of the State in which the unit is located;

(3) The unit is part of a utility system (which, for the purposes of this section only, includes all generators operated by a single utility, including generators that are not fossil fuel-fired) that has decreased its total coal-fired generation, as a percentage of total system generation, by more than twenty percent between January 1, 1980, and December 31, 1985; and

(4) The unit is part of a utility system that during calendar years 1985 through 1987 had a weighted capacity factor for all coal-fired units in the system of less than fifty percent. The weighted capacity factor is equal to:

$$\text{Weighted Capacity Factor} = \frac{\text{Sum of actual generation of all coal-fired units in the utility system}}{\text{Sum of all coal generators' nameplate capacity} \times 8760}$$

(b) *Emissions reductions eligibility.* Sulfur dioxide emissions reductions eligible for allowance credits at units eligible under paragraph (a) of this section must meet the following requirements:

(1) Be made no earlier than calendar year 1995 and no later than calendar year 1999; and

(2) Be due to physical changes to the plant or are a result of a change in the method of operating the plant including but not limited to changing the type or quality of fuel being burned.

(c) *Initial certification of eligibility.* The designated representative of a unit that seeks allowances under this section shall apply for certification of unit eligibility prior to or accompanying a request for allowances under paragraph (d) of this section. A completed application for this certification

shall be submitted according to § 73.13 and shall include the following:

(1) A letter from the Governor of the State in which the unit is located authorizing the unit to make reductions in sulfur dioxide emissions; and

(2) A report listing all units in the utility system, each fossil fuel-fired unit's fuel consumption and fuel heat content for calendar year 1980, and each generator's total electrical generation for calendar years 1980 and 1985 (including all generators, whether fossil fuel-fired, nuclear, hydroelectric or other).

(d) *Request for allowances.* (1) The designated representative of the requesting unit shall submit the request for allowances according to the procedures of § 73.13 and shall include the following information:

(i) The calendar year for which credits for reductions are requested and the actual SO₂ emissions and fuel consumption in that year;

(ii) A letter signed by the designated representative stating and documenting the specific physical changes to the plant or changes in the method of operating the plant (including but not limited to changing the type or quality of fuel being burned) which resulted in the reduction of emissions; and

(iii) A letter signed by the designated representative certifying that all photocopies are exact copies.

(2) The designated representative shall submit each request for allowances no later than March 1 of the calendar year following the year in which the reductions were made.

(e) *Allowance allocation.* The Administrator will allocate allowances to the eligible unit upon satisfactory submittal of information under paragraphs (c) and (d) of this section in the amount calculated by the following equations. Such allowances will be allocated to the unit's 2000 future year subaccount.

(1) "Prior year" means a single calendar year selected by the eligible unit from 1995 to 1999 inclusive.

(2) One "credit" equals one ton of eligible SO₂ emissions reductions.

(3) "ERC units" are units eligible for early reduction credits, and "non-ERC units" are fossil fuel-fired units that are part of the same operating system but are not eligible for early reduction credits.

(4) For any unit that did not operate during 1990, the unit's 1990 SO₂ emission rate will be equal to the weighted average emission rate of all of the other units at the same source that did operate during 1990.

(5) Early reduction credits will be calculated at the unit level, subject to the restrictions in paragraph (e)(6) of this section.

(6) The number of credits for eligible Phase II units will be calculated as follows:

(i) *Comparison of the prior year utilization of ERC units to the 1990 utilization, as a percentage of system utilization.* If, as calculated below, system-wide prior year utilization of ERC units exceeds systems-wide 1990 utilization of ERC units on a percentage basis, then paragraphs (e)(6)(ii) and (iii) of this section apply. If not, the ERC units are eligible to receive early reduction credits as calculated in paragraph (e)(6)(v)(A) of this section.

$$\text{Prior year utilization} = \frac{\sum_{\text{ERC units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}}{\sum_{\text{all system units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}}$$

$$1990 \text{ utilization} = \frac{\sum_{\text{ERC units}} \text{Heat input}_{1990} \text{ (in mmBtu)}}{\sum_{\text{all system units}} \text{Heat input}_{1990} \text{ (in mmBtu)}}$$

(ii) *Comparison of the prior year average emission rate of all ERC units to the prior year average emission rate of all non-ERC units.* If, as calculated below, the system-wide average SO₂ emission rate of ERC units exceeds that of non-

ERC units, then a unit's prior year utilization will be restricted in accordance with paragraph (e)(6)(iv) of this section. If not, then paragraph (iii) of this section applies.

$$\text{ERC unit prior year emissions rate} = \frac{\sum_{\text{ERC units}} \text{SO}_2 \text{ emissions}_{\text{prior year}} \text{ (in pounds)}}{\sum_{\text{ERC units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}}$$

$$\text{Non-ERC unit prior year emissions rate} = \frac{\sum_{\text{non-ERC units}} \text{SO}_2 \text{ emissions}_{\text{prior year}} \text{ (in pounds)}}{\sum_{\text{non-ERC units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}}$$

(iii) *Comparison of the emission rate of the non-ERC units in the prior year to the emission rate of the non-ERC units in 1990.* If, as calculated in paragraph (ii) of this section, the prior year system average non-ERC SO₂ emission rate increases above the 1990 system average non-ERC SO₂ emission rate, as cal-

culated below, then a unit's prior year utilization will be restricted in accordance with paragraph (e)(6)(iv) of this section. If not, the ERC units are eligible to receive early reduction credits as calculated in paragraph (e)(6)(v)(A) of this section.

$$\text{Non-ERC unit 1990 emission rate} = \frac{\sum_{\text{non-ERC units}} \text{SO}_2 \text{ emissions}_{1990} \text{ (in pounds)}}{\sum_{\text{non-ERC units}} \text{Heat input}_{1990} \text{ (in mmBtu)}}$$

(iv) *Calculation of the utilization limit for restricted units.* The limit on utilization for each unit eligible for early re-

duction credits subject to paragraphs (e)(6) (ii) and (iii) of this section will be calculated as follows:

$$\text{ERC unit's Heat input}_{\text{prior year}} \text{ (in mmBtu)} \times \left(\frac{\left(\frac{\sum_{\text{ERC units}} \text{Heat input}_{1990} \text{ (in mmBtu)}}{\sum_{\text{all units}} \text{Heat input}_{1990} \text{ (in mmBtu)}} \right)}{\left(\frac{\sum_{\text{ERC units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}}{\sum_{\text{all units}} \text{Heat input}_{\text{prior year}} \text{ (in mmBtu)}} \right)} \right)$$

This result, expressed in million Btus, is the restricted utilization of the ERC unit to be used in the calculation of early reduction credits in paragraph (e)(6)(v)(B) of this section.

(v)(A) *Calculation of the unit's early reduction credits where the unit's prior year utilization is not restricted.*

$$\frac{\left(\frac{\text{ERC unit's } SO_2 \text{ emission rate}_{1990}}{(\text{in lb/mmBtu})} - \frac{\text{ERC unit's } SO_2 \text{ emission rate}_{\text{prior year}}}{(\text{in lb/mmBtu})} \right)}{2000} \times \text{heat input}_{\text{prior year}} (\text{in mmBtu})$$

(B) *Calculation of the unit's early reduction credits where the unit's prior year utilization is restricted.*

$$\frac{\left(\frac{\text{ERC unit's } SO_2 \text{ emission rate}_{1990}}{(\text{in lb/mmBtu})} - \frac{\text{ERC unit's } SO_2 \text{ emission rate}_{\text{prior year}}}{(\text{in lb/mmBtu})} \right)}{2000} \times \text{restricted heat input from (iv)} (\text{in mmBtu})$$

(vi) The Administrator will allocate to the ERC unit allowances equal to the lesser of the calculated number of

credits in paragraphs (e)(6)(v) (A) or (B) of this section and the following limitation:

$$\frac{\text{ERC unit's heat input}_{\text{prior year}} \times \text{the lesser of } \left[\begin{array}{c} 2.5 \\ \text{or} \\ \text{the most stringent SIP} \\ \text{emissions limit} \\ (\text{in lb/mmBtu}) \end{array} \right]}{2000} - \text{ERC unit's } SO_2 \text{ emissions}_{\text{prior year}} (\text{in tons})$$

(f) *Allowance loan program.* (1) *Eligibility.* Units eligible for Phase II early reduction credits under paragraph (a) of this section are eligible for allowances under this paragraph (f) if the weighted average emission rate (based

on heat input) for the prior year for all of the affected units in the unit's dispatch system was less than the system-wide weighted average emission rate for 1990. The weighted average emission rate shall be calculated as follows:

$$\text{Weighted Average Emission Rate} = \frac{\sum \text{Unit Emission Rate} \times \text{Unit Utilization (in mmBtu)}}{\sum \text{Unit Utilization}}$$

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For the purposes of this calculation, the unit's dispatch system will be the dispatch system as it existed as of November 15, 1990.

(2) *Allowance Calculation.* Allowances under this paragraph (f) shall be calculated as follows:

$$\text{Unit Allowances} = \left[1.75 - \frac{\text{Greater of 1990 emission rate or}}{\text{Prior year emission rate}} \right] \times \text{Prior year utilization/2000}$$

(3) *Allowance Loan.* (i) The number of allowances calculated under paragraph (f)(2) of this section shall be allocated to the unit's year 2000 subaccount.

(ii) The number of allowances calculated under paragraph (f)(2) of this section shall be deducted, contemporaneously with the allocation under paragraph (f)(3)(i) of this section, from the unit's year 2015 subaccount.

(iii) Notwithstanding paragraph (f)(3)(ii) of this section, if the number of allowances to be deducted exceeds the amount of allowances allocated to the unit for the year 2015, allowances in the year 2015 subaccount equal to the amount of allowances allocated to the unit for the year 2015 shall be deducted. In addition to the deduction from the year 2015 subaccount, a sufficient amount of allowances in the year 2016 subaccount (up to the amount of allowances allocated to the unit for the year 2016) shall be deducted contemporaneously, such that the sum of the allowances deducted from the subaccounts equals the number of allowances required to be deducted under paragraph (f)(3)(ii) of this section.

(iv) Notwithstanding paragraph (f)(3)(ii) of this section, the procedure in paragraph (f)(3)(iii) shall be applied as follows to each year after 2015 (year-by-year in numerical order) for which the number of allowances to be deducted from that year's subaccount exceeds the number allocated to the unit for that year: allowances equal to the

number allocated for that year shall be deducted from that year's subaccount and the remainder (up to the amount allocated) necessary to equal the number of allowances required to be deducted under paragraph (f)(3)(ii) of this section shall be deducted from the next year's subaccount.

(v) The owners and operators of the unit shall ensure that sufficient allowances are available to make the full deductions required under paragraphs (f)(3)(ii), (iii), and (iv) of this section. The designated representative may specify the serial number of each allowance to be deducted.

(4) *ERC Units.* Any unit to which allowances are allocated under paragraph (f)(3)(i) of this section shall be considered an ERC unit for purposes of applying the restrictions in paragraph (e)(6) of this section.

[58 FR 15711, Mar. 23, 1993, as amended at 62 FR 34150, June 24, 1997]

§ 73.21 Phase II repowering allowances.

(a) *Repowering allowances.* In addition to allowances allocated under § 73.11, the Administrator will allocate, to each existing unit (under § 72.44(b)(1) of this chapter) with an approved repowering extension plan, allowances for use during the repowering extension period approved under § 72.44(f)(2)(ii) of this chapter (including a prorated allocation for any fraction of a year) equal to:

$$\text{Unit's Repowering Allowances} = \frac{\text{Unit's Baseline} \times \text{the lesser of } \left[\begin{array}{c} \text{1995 SIP} \\ \text{or} \\ \text{1995 Actual Rate} \end{array} \right]}{2000} - \text{Unit's Adjusted Basic Allowances}$$